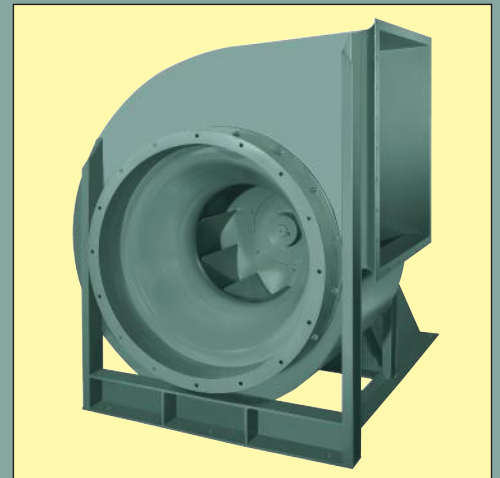
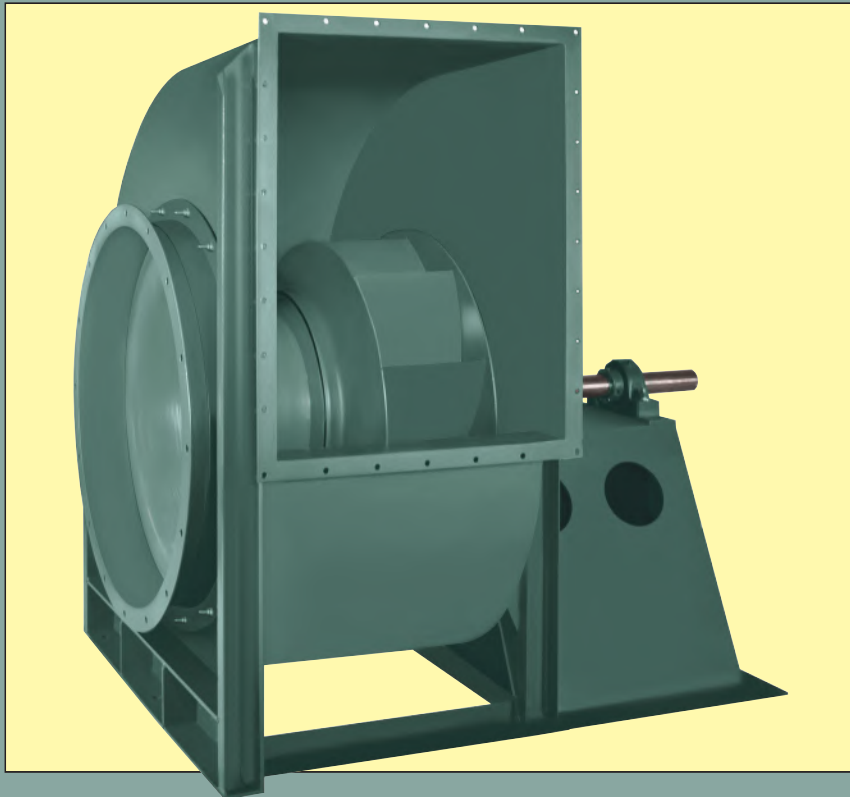


HIGH-EFFICIENCY BACKWARD CURVE **BC FANS**



BC-20 FANS

- Capacities to 260,000 CFM
- Static pressures to 21" WG

BC-40 FANS

- Capacities to 300,000 CFM
- Static pressures to 40" WG



THE NEW YORK BLOWER COMPANY
7660 Quincy Street
Willowbrook, IL 60527-5530

Visit us on the Web: <http://www.nyb.com>
Phone: (800) 208-7918 Email: nyb@nyb.com

BC FANS

Providing more
high-efficiency choices.

APPLICATIONS

With two designs to choose from, the BC line of fans is ideally suited for a wide range of high-pressure, industrial-process applications including: combustion air, solvent recovery, thermal oxidation, fluidizing, combustion, and air recirculation.

DESIGN FEATURES

- Two models to choose from:
BC-20 Fans for applications to 21" WG; wheel dia. 24" to 73".
BC-40 Fans for applications to 40" WG; wheel dia. 24" to 89".
- Direct-drive models to 50" WG.
- Capacities to 300,000 CFM.
- Operating temperatures to 750°F.
- Available in Arrangements 1, 4, 8 and 9.
- Backward curved wheels for mechanical efficiencies to 85%.
- Available in clockwise and counterclockwise rotations in any of seven standard discharge positions.

STANDARD FEATURES

Welded construction—heavy-gauge housing and pedestal. Reinforcements pre-engineered for each model.

Precision balancing—BC wheels are dynamically balanced before final assembly. After assembly, fans are fine-tune balanced at specified operating speed.

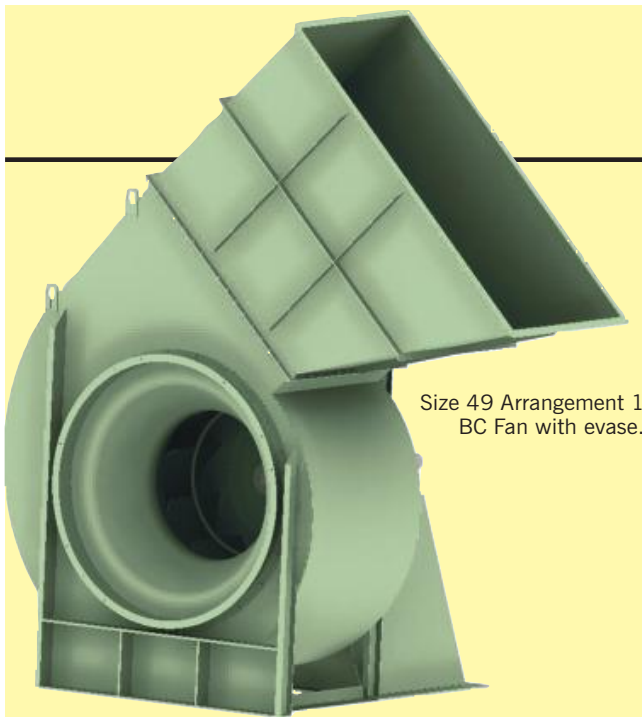
Shafting—turned, ground, and polished shafting is straightened to close tolerance to minimize "run-out" and ensure smooth operation.

Bearings—ball or spherical roller bearings selected for each model to provide extended service life.

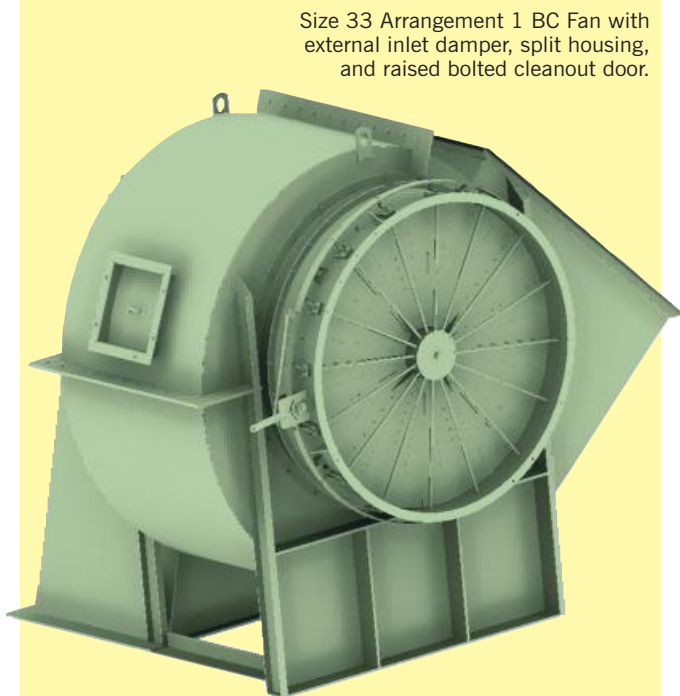
Flanged inlet and outlet—furnished with bolt holes for ease of installation.

Lifting eyes—sized and located for ease of handling.

Shaft seal—ceramic-felt seals standard on all Arrangement 1, 8 and 9 fans...multiple-seal elements encased between metal backing plate and retainers. Teflon® shaft hole closure standard on Arrangement 4 fans. [Teflon is a registered trademark of DuPont.]



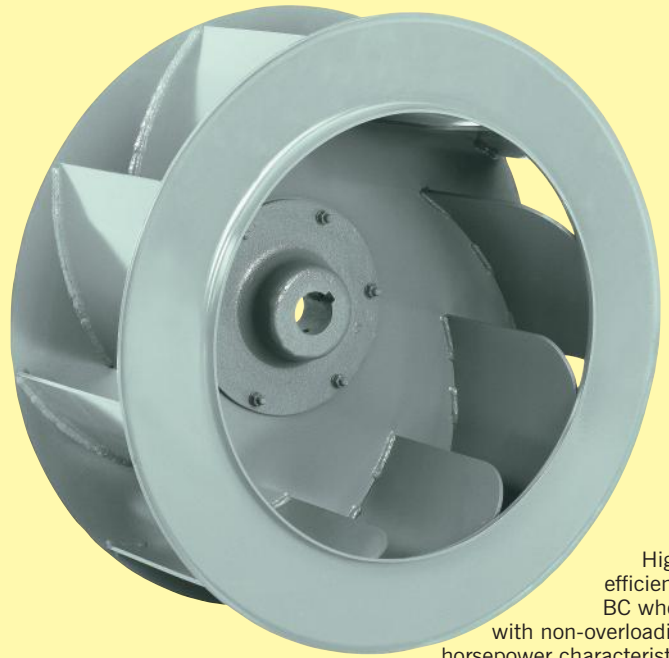
Size 49 Arrangement 1
BC Fan with evase.



Size 33 Arrangement 1 BC Fan with
external inlet damper, split housing,
and raised bolted cleanout door.

BC WHEELS

Based on the proven single thickness backward curved wheel, the New York Blower Company has incorporated the latest state of the art design tools including finite element design, computational fluid dynamics, laboratory testing and alloy technology to create a high efficiency fan that is both cost effective and capable of handling mildly contaminated gas streams.

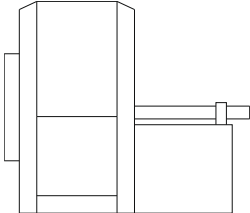
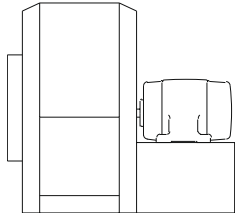
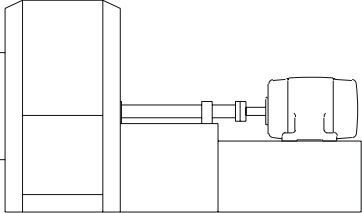


High-efficiency BC wheel with non-overloading horsepower characteristic.

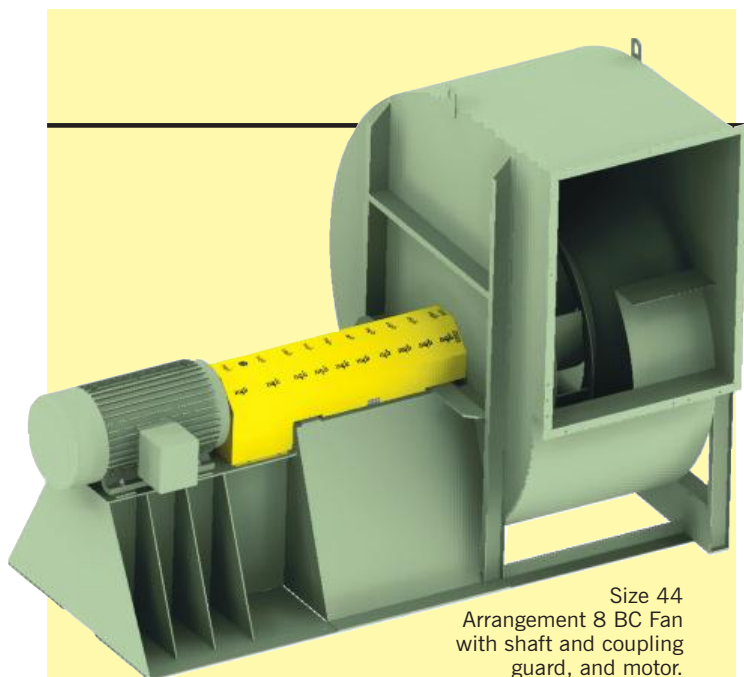
BACKWARD CURVED WHEEL

The BC fan lines are available with a single-thickness backward curved wheel design for slightly contaminated gas streams. Contact your **nyb** sales representative for selection assistance.

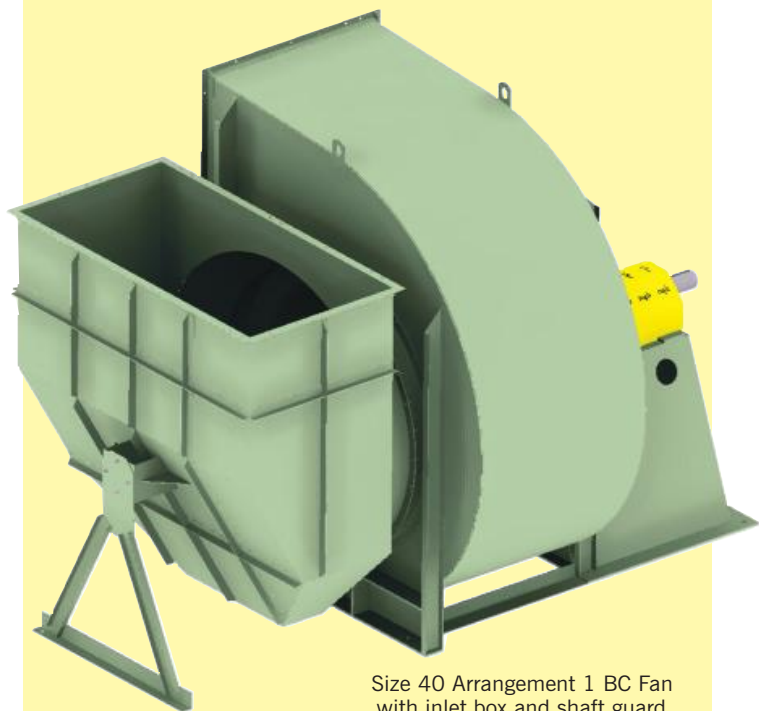
ARRANGEMENT FLEXIBILITY

ARRANGEMENT 1	ARRANGEMENT 4	ARRANGEMENT 8
 <p>Overhung wheel on shaft-and-bearing assembly isolates fan bearings from airstream. Normally this arrangement is used for V-belt-drive fans which provides flexibility in fan performance.</p> <p>Maximum temperature: Standard fan: 300°F. Heat fan: 750°F.</p>	 <p>Wheel mounted directly on motor shaft to provide the most compact design. Elimination of shaft and bearings for minimum maintenance. Narrow-width wheel designs permit higher speeds and pressures.</p> <p>Maximum temperature: 180°F.</p>	 <p>Similar to Arrangement 1 but with integral motor base to accommodate motor and coupling.</p> <p>Maximum temperature: Standard fan: 300°F. Heat fan: 750°F.</p>

ACCESSORIES



Size 44
Arrangement 8 BC Fan
with shaft and coupling
guard, and motor.



Size 40 Arrangement 1 BC Fan
with inlet box and shaft guard.

- **COMPANION FLANGES**

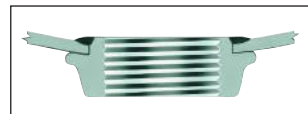
Designed to fit flush with fan inlet and outlet flanges, provided with a matching hole pattern.

- **EVASE**

Aerodynamically designed evase provides attached flow for maximum static pressure regain and reduced outlet velocities. BC Fans with evases offer mechanical efficiencies to 85%.

- **DRAIN**

Welded tank flange [FPT], 1½" located at the lowest point in the housing scroll.



- **CLEANOUT DOOR**

Two types of gasketed door available...**bolted**: closely spaced studs keep door securely sealed...**raised bolted**: allows for insulation when desired, door raised 2" from the fan housing.

- **INLET BOX**

Minimizes entry losses normally associated with 90° turns at or near fan inlet...also available with parallel-blade damper for efficient volume control.

- **SHAFT SEALS**

Ceramic-felt shaft seals consist of compressed ceramic felt elements standard on Arrangements 1 & 8. Lubricated lip seals [Buna-N, Teflon, and Viton®] and gas-purgeable mechanical seals are also available. See your **nyb** representative for availability.

[Viton is a registered trademark of DuPont Dow Elastomers.]

- **INLET DAMPERS**

External vane construction provides prespun air effect to control fan performance efficiently...not available for use with inlet box...maximum temperature: 750°F.

- **OTHER ACCESSORIES**

Also available from **nyb** are drive components such as motors, couplings, and v-belt drives as well as a variety of preventative-maintenance products including vibration detectors, bearing-temperature detectors, and zero-speed switches.

SAFETY EQUIPMENT

Belt guards, inlet and outlet guards, shaft and bearing guards, and coupling guards are available from The New York Blower Company. Contact your **nyb** representative for further information.

NOTE: Safe operation of air-moving equipment is dependent on proper installation and maintenance including selection and use of appropriate safety accessories for the specific installation. The system designer must consider providing guards for all exposed moving parts as well as protection from access to high-velocity airstreams. Improper application, installation, maintenance, or safety-guard selection can create

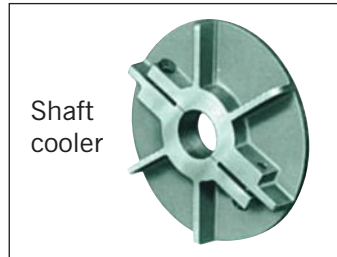
danger to life and limb of personnel. Users and/or installers should read "Recommended Safety Practices For Air Moving Devices" as published by the Air Movement and Control Association International, 30 West University Drive, Arlington Heights, Illinois 60004, which is included with the packing slips for all shipments from **nyb** and available on request.

MODIFICATIONS

- **HEAT-FAN CONSTRUCTION**

Arrangement 1 and 8 BC Fans are designed to handle airstream temperatures to 300°F.

BC Fans handling 301°F. to 750°F. (301°F. to 650°F. for Arr. 9) airstreams are furnished with shaft coolers and shaft cooler guards, and all surfaces are coated with high-temperature paint.



NOTE: Contact **nyb** when the intended service involves a temperature rate change exceeding 20°F. per minute.

- **OUTLET DAMPERS**

Heavy-gauge parallel-blade or opposed-blade outlet dampers are available for volume control. Two standard temperature ranges: 300°F. and 750°F.

- **SPECIAL ALLOY CONSTRUCTION**

Airstream components can be constructed of a wide range of alternate alloys for corrosive applications including stainless steel and duplex stainless steel.

- **COATINGS**

Cost-effective protective coatings under a variety of trade names are available to increase the fan's resistance to adverse, corrosive environments.

- **SPLIT-HOUSING CONSTRUCTION**

Provides for wheel and shaft removal...split portion can be removed without disturbing the inlet or outlet connections. Standard on Sizes 73-89.

- **SPARK-RESISTANT CONSTRUCTION [SRC]**

Intended to minimize the potential for any two or more fan components to generate sparks within the airstream by rubbing or striking during operation.

The following types are available:

AMCA A [AIRSTREAM] SRC

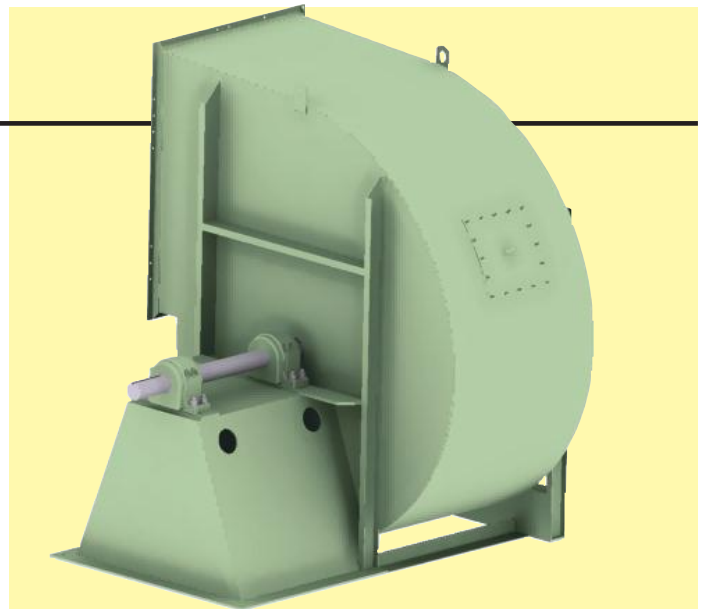
To include all airstream parts constructed of a spark-resistant alloy...maximum temperature: 200°F.

AMCA B [WHEEL] SRC

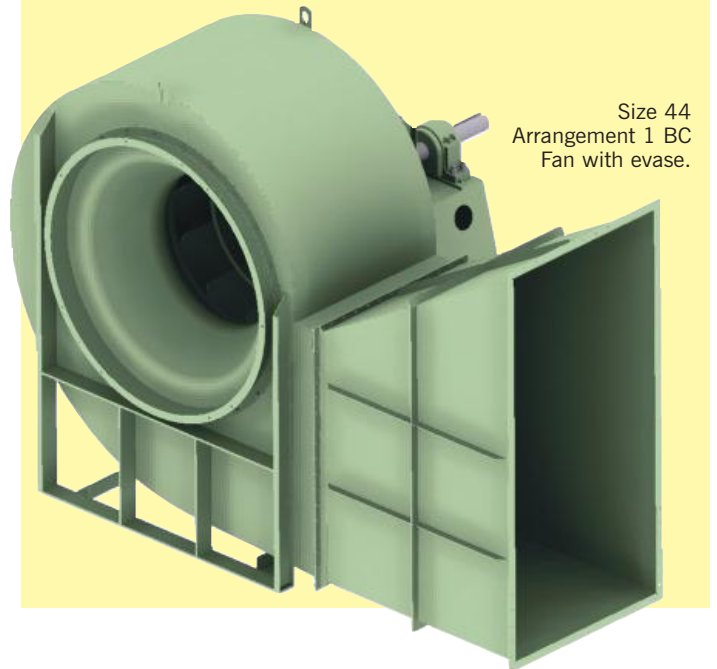
To include the fan wheel constructed of a spark-resistant alloy and a buffer plate around the housing shaft-hole opening...maximum temperature: 200°F.

AMCA C [BUFFER] SRC

To include a spark-resistant alloy buffer affixed to the housing interior adjacent to the wheel backplate, a spark-resistant alloy inlet cone, and a buffer plate around the housing shaft-hole opening... maximum temperature: 650°F.



Size 54 Arrangement 1 BC Fan with flush bolted cleanout door.



Size 44 Arrangement 1 BC Fan with evase.

- **NARROW-WIDTH AND OVER-DIAMETER CONSTRUCTION**

Wheel width and diameter can be adjusted to meet volume and pressure requirements at most efficient operating point. Consult Fan-To-Size Online (www.nyb.com/online-fan-selection-software/) for performance.

- **VIBRATION ISOLATION**

Rubber-in-shear or spring-type isolation mounted to rugged structural unitary base reduces the transmission of vibration to the mounting structure.

- **UNITARY BASE**

Arrangement 1 fan, motor, and guards can be mounted and shipped on a rugged, structural-steel base. Factory-assembled and run-tested prior to shipment.

BC FAN ENGINEERING AND SELECTION

GENERAL

Due to the nature of BC Fans and the applications in which they are used, only experienced engineers and systems designers should select BC Fans. It is recommended that selection be made using New York Blower's Electronic Catalog software and that a New York Blower sales representative be consulted for assistance in optimizing the selection.

EVASE

A determination must be made as to whether or not the system discharge duct configuration will allow the use of an energy-saving evase. Depending upon the specific fan size and point of operation, an evase can significantly increase fan efficiency. Performance curves and specific performance data are available by using the Electronic Catalog.

CORRECTION FACTORS

Fan performance is based on actual cubic feet per minute [ACFM] at the fan inlet at standard density [.075 lbs./ft.³] and static pressure at the fan outlet. Static pressure capabilities are shown in inches water gauge ["WG].

Air-density corrections are necessary for proper selection when air density varies from the standard .075 lbs./ft.³ at 70°F. at sea level. This also occurs when negative static pressure exists [rarefaction] on the inlet side of the fan. Multiply the required static pressure at operating conditions by the appropriate factors in Charts I, II, and III to obtain the corrected static pressure for standard conditions. Pressure and BHP will be reduced at conditions by the inverse of these factors. Multiply one factor by the other if temperature, altitude, and rarefaction are non-standard. For example: if the installation is located at an altitude of 4000 feet, the gas temperature is 300°F. and the inlet pressure is -40"WG, the correction factor is 1.84 [1.16 x 1.43 x 1.11].

FAN ARRANGEMENT

The choice of a fan arrangement must be made to determine specific fan capabilities. Space availability, airstream temperature, maintenance, control methods, performance requirements, and past practice must all be considered in the selection of fan arrangement. See page 3 and 7 for further information on arrangements.

HEAT FANS

Fans handling hot airstreams must be kept in operation after system shutdown, until the airstream cools below 200°F. to prevent damage to the fan. The fan wheel or shaft might otherwise distort due to "heat-soaking". The shaft cooler on heat fans is only effective while rotating. Contact **nyb** when the application involves temperature changes greater than 20°F. per minute.

Refer to the selection example on page 7 for the effect of temperature on the maximum safe speed of wheels and the temperature derate factors in Chart IV. Charts VI and VII below list the speed limits by fan arrangement.

CHART V MAXIMUM WHEEL OPERATING SPEEDS [RPM] AT 100% WIDTH		
Size	BC-20	BC-40
24	2665	4130
27	2415	3750
30	2120	3375
33	1860	3065
36	1673	2770
40	1476	2515
44	1364	2275
49	1239	2065
54	1091	1865
60	966	1685
66	877	1530
73	796	1385
80	-	1250
89	-	1050

CHART IV TEMPERATURE DERATES FOR STANDARD BC WHEELS		
Temp °F	BC-20 Steel	BC-40 Steel
-50	1.00	1.00
70	1.00	1.00
120	0.98	0.98
200	0.96	0.96
300	0.95	0.95
400	0.95	0.95
500	0.94	0.94
600	0.92	0.92
700	0.91	0.91
750	0.90	0.90

CHART I ALTITUDE [ft.] CORRECTIONS	
Alt.	Factor
0	1.00
500	1.02
1000	1.04
1500	1.06
2000	1.08
2500	1.10
3000	1.12
3500	1.14
4000	1.16
4500	1.18
5000	1.20
5500	1.23
6000	1.25
7000	1.30
8000	1.35
9000	1.40
10000	1.45

CHART II TEMPERATURE CORRECTIONS	
Temp. °F.	Factor
0	.87
20	.91
40	.94
60	.98
70	1.00
80	1.02
100	1.06
120	1.09
140	1.13
160	1.17
180	1.21
200	1.25
300	1.43
400	1.62
500	1.81
600	2.00
750	2.28

CHART III RAREFACTION CORRECTIONS	
Neg. inlet pressure "WG	Factor
15	1.04
20	1.05
25	1.07
30	1.08
35	1.09
40	1.11
45	1.12
50	1.14
55	1.16
60	1.17
65	1.19
70	1.21
75	1.23
80	1.25
85	1.26

CHART VI DIRECT-DRIVE UNIT OPERATING SPEEDS [RPM]				
Size	BC-20		BC-40	
	Arr. 4	Arr. 8	Arr. 4	Arr. 8
24	3200*	2665	3550	4130
27	2905*	2415	3550	3750
30	2615*	2120	3550*	3375
33	2375*	1860	3550*	3065
36	2150*	1780	3140*	2600
40	1950*	1480	2850*	2200
44	1770*	1364	2580*	2200
49	1770*	1239*	2340*	2000
54	—	1180	—	1800
60	—	1180	—	1685
66	—	1180	—	1500
73	—	890	—	1385
80	—	—	—	1200
89	—	—	—	1050

CHART VII BELT-DRIVE UNIT OPERATING SPEEDS [RPM] Arrangement 1		
Size	BC-20	BC-40
24	2665	3800
27	2415	3400
30	2120	3000
33	1860	2850
36	1673	2500
40	1476	2200
44	1364	—
49	1239	—
54	1091	—
60	966	—
66	877	—
73	796	—

* Requires narrow-width wheel construction.

DIRECT-DRIVE FAN SELECTIONS

It is often more cost-effective to use direct-drive fans due to reduced bearing loads and maintenance. However, a major objection to direct-drive arrangements in the past was the inability to adjust fan speed if system requirements changed. With the advent of variable frequency drives [VFD] the speed and therefore performance of direct-drive fans can now be adjusted to meet varying process requirements.

ARRANGEMENT 8 FANS	The shafts and bearings for Arrangement 8 BC Fans have been pre-engineered to simplify selection and provide best value. The standard Arrangement 8 fan temperature limit is 300°F. with a high heat option to 750°F. Available in 24" to 89" wheel diameters.
ARRANGEMENT 4 FANS	With the fan wheel directly mounted on the motor shaft, speed limitations imposed by the fan's shaft and bearings are eliminated. In addition, fan maintenance is further reduced by the elimination of these components. The maximum temperature for Arrangement 4 fans is 180°F. Available in 24" to 49" wheel diameters.
WHEEL SPEED VS. WIDTH	A major component in the determination of wheel maximum safe speed is blade strength. Narrower wheels are inherently stronger permitting higher wheel maximum safe speeds. Final selection of direct-drive BC Fans can only be optimized using nyb Electronic Catalog software.

BELT-DRIVE FAN SELECTIONS

The use of belt-drive arrangements provides flexibility in fan performance by changing sheaves and belts to modify fan speed. The high speeds and horsepower requirements of BC Fans require proper drive selection to minimize shaft stress and maximize belt and bearing life.

To ensure satisfactory motor performance, 1800 RPM motors 250 HP and above require motor-vendor approval of drive selection.

Arrangement 1 fans—overhung wheel keeps bearings out of airstream. Temperature limit for standard fan is 300°F., optional high-heat construction suitable to 750°F. (Arrangement 1) Note: belt-drive fans are available in 24" to 73" wheel diameters.

HOW TO SELECT A BELT-DRIVE FAN

PROCEDURES	STEPS	EXAMPLE
For a given CFM and static pressure, capacity tables can be used to obtain fan size, outlet velocity, wheel RPM, and BHP. If capacities are at conditions other than 70°F., sea level, or standard density [.075 lbs./cu.ft.], correction factors must be applied to static pressure and BHP.	1	Fan required for 29,000 CFM, 7.86"SP at 120°F., and sea level. The system has 20" negative pressure at the fan inlet. The system does not allow for use of an evase outlet. The fan is to be Arrangement 1, belt-drive.
If temperature, altitude, or density-rarefaction corrections are required, determine the correction factor using Charts I, II, and III from page 6.	2	Correction factor for 120°F. is 1.09 from Chart II. Correction factor for rarefaction of negative 20" from Chart III is 1.05. The combined factor $1.09 \times 1.05 = 1.145$.
Multiply the required operating SP by the correction factor[s]. This gives the equivalent SP at .075 lb./cu. ft. density.	3	The required fan SP at standard air is $7.86 \times 1.145 = 9.0$ at 0.75 lb./cu. ft.
Select the fan size, RPM, and BHP from the capacity tables. Note: For a given performance, larger fans are generally more efficient and will have lower operating cost over the life of the fan.	4	A Size 49 BC-20 Fan is selected for 29,000 CFM, at 9.0"SP, 964 RPM, 59.5 BHP at [standard air] .075 lbs./cu.ft. density.
Determine the maximum safe speed of the fan at operating [or design] temperature from Charts IV and V on page 6.	5	From Chart V on page 6, the maximum safe speed is 1239 RPM for a BC-20 Fan at 70°F. The correction factor from Chart IV for 120°F. is .98, when multiplied by 1239 gives 1214 RPM at 120°F. The fan is satisfactory for operation at 120°F.
Determine operating BHP by dividing the BHP from the capacity tables by the correction factor[s] used in step 3.	6	The fan-operating BHP is 59.5 divided by the combined correction factor. $59.5 \div 1.145 = 52$ BHP.
Confirm maximum unit safe speed for the fan model and arrangement from Chart VII.	7	From Chart VII the Arrangement 1 maximum unit safe speed for a Size 49 BC-20 Fan is 1364 RPM...satisfactory for operation at 964 RPM.

PERFORMANCE FOR FANS WITH **BC-40** WHEELS

SIZE 80	CFM	OV	29"SP		30"SP		31"SP		32"SP		33"SP		34"SP		35"SP		36"SP		37"SP		
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	
			140000	3641	1053	901	1070	938	1088	978	1104	1013	1119	1048	1134	1082					
150000	3901	1064	954	1079	989	1094	1025	1110	1063	1124	1098	1139	1135	1154	1172			1170	1213	1185	1252
160000	4161	1079	1012	1094	1050	1108	1086	1119	1115	1134	1155	1150	1198	1165	1238	1180	1280	1180	1280	1194	1318
170000	4421	1099	1082	1110	1112	1124	1150	1139	1193	1150	1224	1165	1267	1176	1299	1190	1341				
180000	4681	1119	1152	1130	1184	1144	1225	1159	1270	1170	1303	1180	1334	1194	1378						
190000	4941	1139	1224	1154	1270	1165	1309	1176	1338	1190	1383	1200	1416								
200000	5202	1159	1301	1174	1347	1185	1383	1200	1432												
210000	5462	1180	1386	1194	1430																
220000	5722	1196	1461																		

SIZE 89	CFM	OV	26"SP		27"SP		28"SP		29"SP		30"SP		31"SP		32"SP		33"SP		34"SP	
			RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
			160000	3448	907	932	922	971	936	1008	953	1054								
170000	3664	912	971	927	1013	942	1056	958	1102	973	1145	988	1190	1002	1232	1013	1265			
180000	3879	922	1021	936	1063	953	1115	964	1149	978	1192	993	1239	1004	1274	1018	1320	1033	1369	
190000	4095	936	1081	947	1116	962	1165	973	1201	988	1251	1002	1298	1013	1335	1028	1387	1038	1421	
200000	4310	953	1151	962	1181	973	1218	988	1271	998	1306	1013	1360	1024	1400	1038	1451	1048	1488	
210000	4526	964	1201	978	1250	988	1286	1002	1337	1013	1378	1024	1420	1038	1473	1048	1512			
220000	4741	982	1277	993	1317	1004	1358	1018	1412	1028	1451	1042	1507							
230000	4957	998	1350	1008	1387	1022	1441	1033	1485	1044	1529									
240000	5172	1013	1423	1024	1465	1038	1520	1048	1560											

nyb Laboratory



Lab

The New York Blower Company has an AMCA accredited laboratory and research center to ensure the company performs to the highest standards in product development and research including sound, air performance, vibration, finite element analysis, and speed-testing.

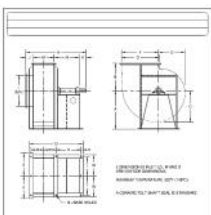


Lab Features Include:

- Flows to 130,000 CFM
- Pressures to 100" WC
- Horsepower to 500 bhp
- 6 Airflow Test Chambers
- 2 Sound Rooms
- 15,000 Ft³
- 44,000 Ft³
- Other Various Testing Capabilities

FAN TO SIZE AND DRAWINGS ON DEMAND

Fan to Size online allows customers to select fans without the need to download software on their computers or tablets. Fans can be selected by product categories, types or applications. Additionally, drawings are generated to supplement fan selections.



FAN TO SIZE SELECTION BENEFITS

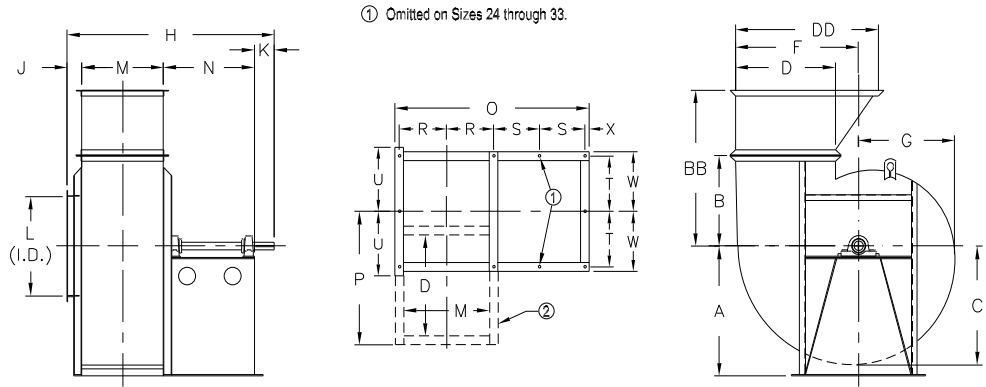
- Compare multiple product lines.
- Metric or English units.
- Add silencers.
- Add accessories.
- Save data for future use.
- Calculate density based on rarefaction, compression, and molecular weight.

DRAWINGS ON DEMAND BENEFITS

- Generate drawing package specifically tailored to the user's application requirements.
- Fan-performance curves.
- Select fan's rotation, discharge position, motor frame size and u-base.
- Add accessories (dampers, silencers, stack hoods, curb caps)
- Installation and Maintenance Manuals.

ARRANGEMENT

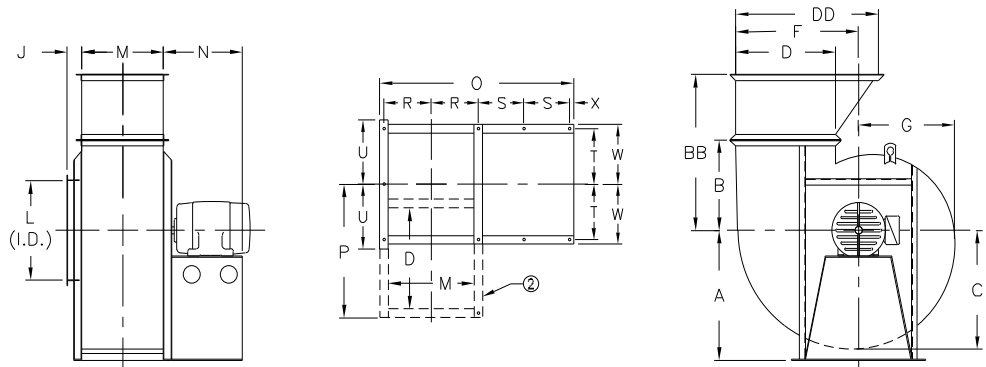
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① Omitted on Sizes 24 through 33.

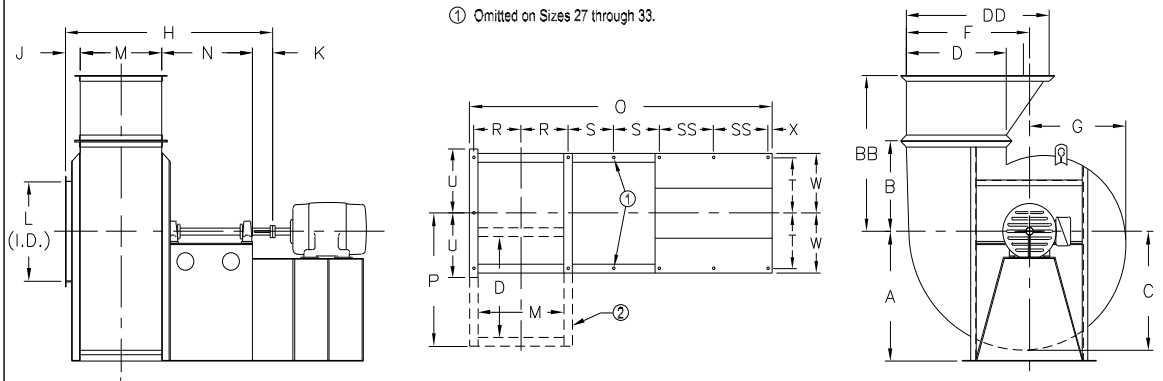
ARRANGEMENT

4



ARRANGEMENT

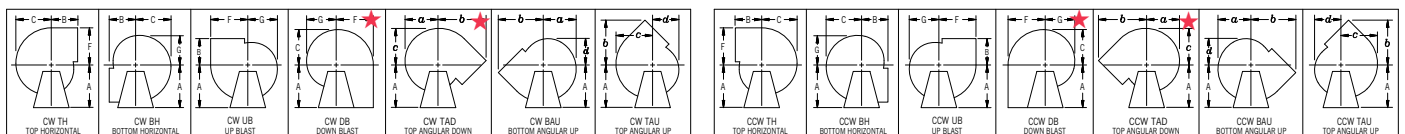
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① Omitted on Sizes 27 through 33.

② Base bars form flanged outlet on Down Blast.

M, D, and DD are outside housing dimensions. J is from housing side over inlet. L is inside diameter.



★ Down Blast and Top Angular Down discharge positions must be evaluated for clearance of accessories such as a unitary base, outlet damper, evase, ect. Consult nyb with specific details.

The New York Blower Company has a policy of continuous product development and reserves the right to change designs and specifications without notice.

DIMENSIONS [INCHES] Not to be used for construction unless certified.

ARRANGEMENTS 1, 4, AND 8

Size	A							B				BB		C	D	DD	F	G	L	M	P
	TH	TAD	BH	BAU	UB	TAU	DB	*	TAD	*	TAD										
24	21¼	21¼	30½	30½	23¾	23¾	19¼	19¼	28¼	44½	69	21¼	26½	40½	26½	18½	26⅞	19½	29¼		
27	23½	23½	32¾	32¾	25⅞	25⅞	21¼	21¾	30½	48½	76½	23¾	29	44¾	28½	20¾	29½	21½	31½		
30	25½	25½	35⅞	35⅞	28½	28½	23½	23½	34¼	54¾	85¼	26	32¼	49½	31⅞	22½	32⅞	23⅞	34⅞		
33	27¾	27¾	39½	39½	31½	31½	25⅞	25⅞	37½	59¾	93¾	28¾	35½	54½	35½	25½	36½	26¾	39½		
36	30¾	30¾	42¾	42¾	34½	34½	28¾	28¾	40¾	66½	103¾	31¾	39½	60½	38¾	27⅞	40½	29½	42¾		
40	33¼	33¼	46¾	46¾	37¾	37¾	31¾	31¾	44¾	72½	114½	34¾	43½	66⅞	42½	30½	43⅞	32½	46½		
44	36½	36½	51¼	51¼	41	41	34⅞	34⅞	49¾	80¾	126¾	38½	47¾	73⅞	47½	33½	48⅞	35½	51½		
49	39¾	39¾	56½	56½	44⅞	44⅞	38½	38½	53½	88½	139½	42½	52¾	81¾	51½	37½	53⅞	39	55½		
54	43¾	43¾	62	62	49¾	49¾	42½	42½	58½	98¼	154	46½	57½	90¾	57½	41½	59¾	43¼	62½		
60	48½	48½	68½	68½	54¾	54¾	47	47	64	108¾	170¼	51½	64	99½	63½	45¾	66½	47¾	68½		
66	52¾	52¾	74¾	74¾	59½	59½	51¾	51¾	70¼	119¾	187½	56½	70¾	109½	69⅞	50¾	72¾	52¾	74¾		
73	58	58	81¾	81¾	65½	65½	57¼	57¼	76¾	132¾	207¾	62½	77½	121¾	77¼	55½	80¾	58½	82¼		
80	63¾	63¾	90	90	72½	72½	63¾	63¾	82½	146¾	229½	69¾	86	134	85½	61¾	88¾	64¾	90½		
89	70½	70½	98¾	98¾	79¼	79¼	69¾	69¾	89¼	161¼	252¾	76½	94¾	147½	94¾	67¾	97¾	70¾	99½		

NA – Not available. * For TH, BH, UB, BAU and TAU discharges. For DB discharge, use A dimension for B.

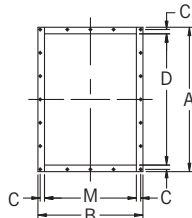
Size	R	U	W	a	b		c	d	H		J	K		N	O	S	T	X		Base holes
					BAU/TAU	TAD			Arr. 1	Arr. 8		Arr. 1	Arr. 1					Arr. 1	Arr. 1	
24	11¼	18	15½	19½	32	38½	22¾	17½	47½	4½	5	5½	18	43¼	17¾	14	1½	1½	¾	
27	12¼	19¾	16⅞	22	35¼	42¼	24⅞	19¼	51¾	4¾	5½	6	20	47¼	19¾	15¾	1½	1½	¾	
30	13½	21¼	18⅞	24½	39½	46¾	27½	21½	56½	4¾	6	6	22	51¾	21¾	17¾	1½	1½	¾	
33	15¾	23	21	26⅞	43½	51½	30½	23½	62	5½	6½	6	24	58½	23¾	19	2	2	¾	
36	16½	25	22½	29¼	47¾	56½	33¾	26	68¾	5½	7½	6	27	63¾	13¾	20½	2	2	1	
40	18½	27½	23¼	32¾	52½	61¾	37½	28¾	74⅞	5½	7¾	7	30	69¾	14¾	21¼	2	2	1	
44	19¾	29¾	25	36¾	58	68¾	40½	31¾	81¾	5½	8½	7	33	76½	16½	23	2	2	1	
49	21½	32¼	26	39½	63¾	74½	45½	34½	88¾	5½	8¾	7	36	82¾	17¾	24	2	2	1	
54	24¾	35¼	29½	44½	70½	82	49½	38½	97¾	5½	9	7	40	92¾	19½	27	2½	2½	1	
60	26¾	38½	31½	48½	78½	90¼	55½	42¾	107¾	5½	9½	8	45	102¾	22½	29	2½	2½	1	
66	28½	42	33½	53½	86	99½	60½	46½	117½	5½	9¾	8	49	111¼	24½	31	2½	2½	1	
73	31½	46	35½	59½	95½	108½	67	51¾	127¾	5½	9¾	8	54	121¾	24½	33	2½	2½	1	
80	34½	50½	42½	65½	105½	119	74½	57¾	—	5½	—	8	60	—	29½	40	—	—	1	
89	37½	55½	47½	72½	115¾	129¾	81¾	63½	—	5½	—	9	67	—	33½	45	—	—	1	

NA – Not available. † Dimensions will vary with narrow-width construction.

Tolerance: ± 1/8"

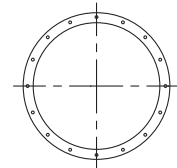
FLANGED OUTLET AND EVASE

1. Mounted flush with edge of housing outlet.
2. Furnished as standard with holes on 4" centers from centerline.



FLANGED INLET

Furnished as standard with holes starting on vertical centerline.



DIMENSIONS [INCHES]										
Model	A		B†	C	D	M†	Standard holes			
	Fan	Evase					Sides		†Top/bottom	Size
							Fan	Evase		
24	28½	43¼	22	¾	26½	19½	9	13	5	7/16
27	31½	47¾	24	¾	29	21½	9	13	5	7/16
30	34¾	52¾	26¾	¾	32¼	23¾	9	15	5	7/16
33	38½	58	29¾	⅞	35½	26¾	11	15	7	7/16
36	42½	63¾	32½	⅞	39½	29½	11	17	7	7/16
40	46½	70	35½	⅞	43½	32½	13	19	7	7/16
44	50¾	77	38½	⅞	47¾	35½	13	21	9	7/16
49	56¾	85¾	43	1⅞	52¾	39	15	23	9	9/16
54	61½	94¼	47¼	1⅞	57½	43¼	17	23	11	9/16
60	68	103¾	51¾	1⅞	64	47¾	17	27	11	9/16
66	74¾	113¾	56¾	1⅞	70¾	52¾	19	29	13	9/16
73	81½	125¼	62½	1⅞	77½	58½	21	33	15	9/16
80	90	138½	68¾	1⅞	86	64¾	23	35	15	9/16
89	98¾	151¾	74¾	1⅞	94¾	70¾	25	39	17	9/16

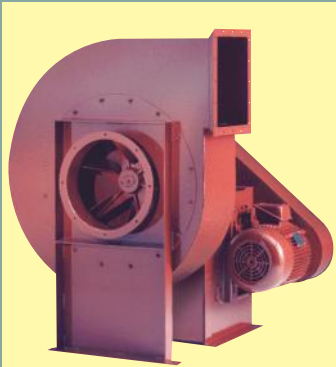
†Dimensions may vary with narrow-width construction. Tolerance: ± 1/8"

DIMENSIONS [INCHES]					
Model	Inside diameter	Bolt circle	Outside diameter	Standard holes	
				Number	Diameter
24	26⅞	29½	30⅞	16	9/16
27	29½	31¾	33½	16	9/16
30	32⅞	35½	36⅞	16	9/16
33	36½	38¾	40½	16	9/16
36	40½	42¾	44½	16	9/16
40	43¾	46½	47¾	24	9/16
44	48¾	51½	52¾	24	9/16
49	53¾	56½	57¾	24	9/16
54	59¾	61¾	63¾	24	9/16
60	66½	68¾	70¾	32	9/16
66	72¾	74¾	76¾	32	9/16
73	80¾	82¾	84¾	32	9/16
80	88¾	90¾	92¾	32	9/16
89	97¾	99¾	101½	32	9/16

Tolerance: ± 1/8"

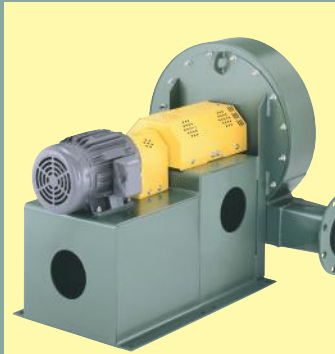
COMPLETE SELECTION OF AIR-MOVING EQUIPMENT

The New York Blower Company offers thousands of different types, models, and sizes of air-moving equipment. Contact your nyb representative for assistance in identifying the best fan for your application.



DUST/MATERIAL HANDLING

Wide range of duty available with unique fan lines capable of handling light dust to heavy material. Typical applications include dust-collection and high-pressure process along with material-conveying.



AIR-HANDLING [CENTRIFUGAL]

Designed for clean to moderately dirty gas streams. Commercial and industrial HVAC, process cooling, light material-conveying, heat removal, and dryer exhaust are just a few of the numerous sample applications



AIR-HANDLING [AXIAL]

For the ideal handling of clean to moderately dirty airstreams. Commercial and industrial HVAC, drying and cooling systems, fume extraction, and process-heat removal are typical applications.

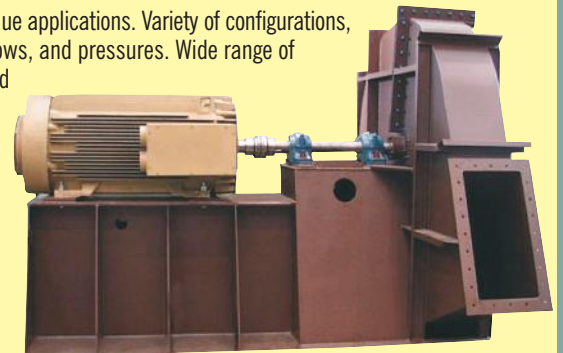


FIBERGLASS REINFORCED PLASTIC [FRP]

Choice of performance and duty for corrosive gas streams. Applications include chemical process, wastewater treatment, laboratory hood exhaust, and tank aeration.

CUSTOM PRODUCTS

Designed for unique applications. Variety of configurations, temperatures, flows, and pressures. Wide range of modifications and accessories are available to meet the most demanding specifications.



Leading the industry forward since 1889



ROOF VENTILATORS

Including both hooded and upblast ventilators, propeller fans, and centrifugal roof exhausters. These units are ideal for industrial, commercial, and institutional applications.



HEATING PRODUCTS

Industrial-duty steam unit heaters with steam heating coils are available for facility heating and process-heat transfer.



PROCESS/FAN COMPONENTS

Plug fans, plenum fans, wheels, inlet cones, and housings for a wide variety of OEM applications. Process/fan components are used in air-handling units, ovens, dryers, freezer tunnels, and filtration systems.